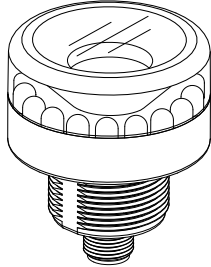


## Datasheet

Daylight-visible, general-purpose indicators for indoor or outdoor use



- Intense levels of light output for areas with high ambient light - even outdoors
- Viewable around entire perimeter; some models also emit light from top
- 1- or 2-color models available
- Rugged, sealed thermoplastic housing rated for IP67 and IP69K
- Bright, even light
- 12 to 30 V dc or 85 to 130 V ac (75 to 120 V dc) or 100 to 250 V ac (90 to 240 V dc) operation, depending on model
- 12V dc operation useful for applications on mobile vehicles
- Consult factory for models with strobing capability

## Models

Model		Connection <sup>1</sup>	LED Color(s)	Input Voltage
Perimeter View Only	Perimeter + Top View			
K50BLXGXPO	K50BCLXGXPO	4-pin Euro integral QD connector	Green	12 to 30 V dc
K50BLRXPO	K50BCLRXPO		Red	
K50BLXYPO	K50BCLXYPO		Yellow	
K50BLXBPO	K50BCLXBPO		Blue	
K50BLXWPO	K50BCLXWPO		White	
K50BLGRPO	K50BCLGRPO		Green / Red	
K50BLGA120Q	K50BCLGA120Q	3-pin Micro integral QD connector	Green	85 to 130 V ac or 75 to 120 V dc
K50BLRA120Q	K50BCLRA120Q		Red	
K50BLYA120Q	K50BCLYA120Q		Yellow	
K50BLWA120Q	N.A.		White	
K50BLBA120Q	K50BCLBA120Q		Blue	
K50BLGA230Q	K50BCLGA230Q		Green	
K50BLRA230Q	K50BCLRA230Q	Red		
K50BLYA230Q	K50BCLYA230Q	Yellow		
K50BLBA230Q	K50BCLBA230Q	Blue		

<sup>1</sup> Integral QD models only are listed.

- For 150 mm PVC pigtail with QD, replace Q with QP in model number (example, K50BLXGXQP).
- For 2 m (6.5') cable, omit suffix Q from model number (example, K50BLXGXP).
- A model with a QD requires a mating cable (see [Accessory Cordsets](#)).



## Specifications

### Supply Voltage and Current - 12-30 V dc models

K50BL 1-color models: 140 mA max. at 12 V dc, 70 mA max. at 30 V dc

K50BCL 1-color models: 160 mA max. at 12 V dc, 80 mA max. at 30 V dc

K50BL 2-color models, per color: 75 mA max. at 12 V dc, 40 mA max. at 30 V dc

K50BCL 2-color models, per color: 95 mA max. at 12 V dc, 40 mA max. at 30 V dc

### Supply Voltage and Current - 120 V ac models

K50BL models: 85 to 130 V ac or 75 to 120 V dc at 16 mA max. 50/60 Hz

K50BCL models: 85 to 130 V ac or 75 to 120 V dc at 60 mA max. 50/60 Hz

### Supply Voltage and Current - 230 V ac models

K50BL models: 100 to 250 V ac or 90 to 240 V dc at 20 mA max. 50/60 Hz

K50BCL models: 100 to 250 V ac or 90 to 240 V dc at 25 mA max. 50/60 Hz

### Supply Protection Circuitry

Protected against reverse polarity and transient voltages

### Indicators

LED colors are independently selected, depending on model

### Environmental Rating

Rated IEC IP67 and IP69K, per DIN 40050

### Construction

Base and covers: polycarbonate

### Connections

Integral 4-pin M12/Euro-style (dc models) QD, 3-pin Micro-style (ac models) QD, or 2 m (6.5 ft) integral cable, depending on model

### Operating Conditions

-40 °C to +50 °C (-40 °F to +122 °F)

90% at +50 °C maximum relative humidity (non-condensing)

### Vibration and Mechanical Shock

All models meet Mil. Std. 202F requirements method 201A (vibration: 10 to 60 Hz max., double amplitude 0.06 in, maximum acceleration 10G). Also meets IEC 947-5-2; 30G 11 ms duration, half sine wave.

### Indicator Power-up Response Time

DC models

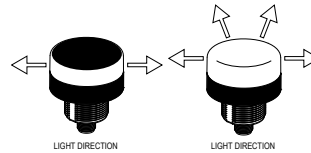
ON: 10 ms; OFF: 7 ms

AC models

ON/OFF: 500 µs

### Application Note

Light emits 360° from housing sides in K50BL models and housing sides and tops in K50BCL models.

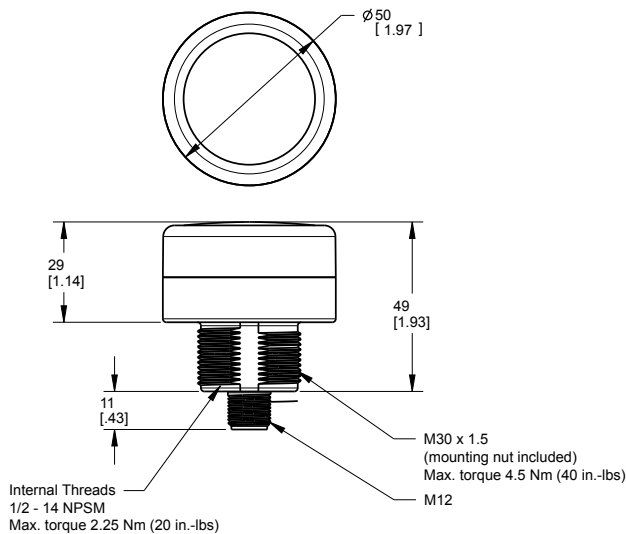


### Certifications



(dc models only)

## Dimensions



## Wiring – DC Models

1-Color Models (PNP/NPN Selectable)			
Sourcing (PNP) Input	Sinking (NPN) Input	Pinout	Wiring Key:
			1 = Brown 2 = White 3 = Blue 4 = Black C = Indicator color X = Not used

2-Color Models			
Sourcing (PNP) Input	Pinout	Wiring Key:	
		1 = Brown 2 = White 3 = Blue 4 = Black C1 = Indicator color 1 C2 = Indicator color 2 X = Not used	

## Wiring – AC Models

Quick-Disconnect (QD) Models	Cabled Models
<p><b>Wiring Key:</b>                      1 = Green (not used)                      2 = Red/Black                      3 = Red/White</p>	<p><b>Wiring Key:</b>                      1 = Black                      3 = White</p>
<p>Pinout</p>	

## Accessory Cordsets

4-Pin Threaded M12/Euro-Style Cordsets				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC-406	1.83 m (6 ft)	Straight		
MQDC-415	4.57 m (15 ft)			
MQDC-430	9.14 m (30 ft)			
MQDC-450	15.2 m (50 ft)			

4-Pin Threaded M12/Euro-Style Cordsets				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC-406RA	1.83 m (6 ft)	Right-Angle		
MQDC-415RA	4.57 m (15 ft)			
MQDC-430RA	9.14 m (30 ft)			
MQDC-450RA	15.2 m (50 ft)			

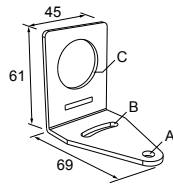
3-Pin Micro-Style Cordsets				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC-306	1.83 m (6 ft)	Straight		<p>1 = Green 2 = Red/Black 3 = Red/White</p>
MQDC-315	4.57 m (15 ft)			
MQDC-330	9.14 m (30 ft)			
MQDC-306RA	1.83 m (6 ft)	Right-Angle		
MQDC-315RA	4.57 m (15 ft)			
MQDC-330RA	9.14 m (30 ft)			

## Accessory Mounting Brackets

All measurements are in mm

### SMB30A

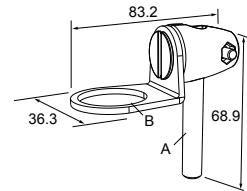
- Right-angle bracket with curved slot for versatile orientation
- Clearance for M6 (¼ in) hardware
- Mounting hole for 30 mm sensor
- 12-ga. stainless steel



Hole center spacing: A to B=40  
Hole size: A=ø 6.3, B= 27.1 x 6.3, C=ø 30.5

### SMB30FA

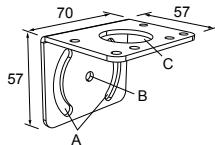
- Swivel bracket with tilt and pan movement for precise adjustment
- Mounting hole for 30 mm sensor
- 12-ga. 304 stainless steel
- Easy sensor mounting to extrude rail T-slot
- Metric and inch size bolt available



Bolt thread: SMB30FA, A= 3/8 - 16 x 2 in; SMB30FAM10, A= M10 - 1.5 x 50  
Hole size: B= ø 30.1

### SMB30MM

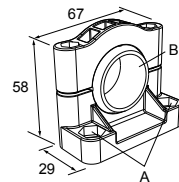
- 12-ga. stainless steel bracket with curved mounting slots for versatile orientation
- Clearance for M6 (¼ in) hardware
- Mounting hole for 30 mm sensor



Hole center spacing: A = 51, A to B = 25.4  
Hole size: A = 42.6 x 7, B = ø 6.4, C = ø 30.1




### SMB30SC

- Swivel bracket with 30 mm mounting hole for sensor
- Black reinforced thermoplastic polyester
- Stainless steel mounting and swivel locking hardware included



Hole center spacing: A=ø 50.8  
Hole size: A=ø 7.0, B=ø 30.0

## Elevated Mount System

Model			Features	Components
SA-M30E12 - Black Acetal			<ul style="list-style-type: none"> <li>Streamlined black acetal stand-off pipe adapter/cover</li> <li>Connects between 30 mm light base and ½ in. NPSM/DN15 pipe</li> <li>Mounting hardware included</li> </ul>	
Polished 304 Stainless Steel	Black Anodized Aluminum	Clear Anodized Aluminum	<ul style="list-style-type: none"> <li>Elevated-use stand-off pipe (½ in. NPSM/DN15)</li> <li>Polished 304 stainless steel, black anodized aluminum, or clear anodized aluminum surface</li> <li>½ in. NPT thread at both ends</li> <li>Compatible with most industrial environments</li> </ul>	
SOP-E12-150SS 150 mm (6 in) long	SOP-E12-150A 150 mm (6 in) long	SOP-E12-150AC 150 mm (6 in) long		
SOP-E12-300SS 300 mm (12 in) long	SOP-E12-300A 300 mm (12 in) long	SOP-E12-300AC 300 mm (12 in) long		
SOP-E12-900SS 900 mm (36 in) long	SOP-E12-900A 900 mm (36 in) long	SOP-E12-900AC 900 mm (36 in) long		
SA-E12M30 - Black Acetal			<ul style="list-style-type: none"> <li>Streamlined black acetal mounting base adapter/cover</li> <li>Connects between ½ in. NPSM/DN15 pipe and 30 mm (1-3/16 in) drilled hole</li> <li>Mounting hardware included</li> </ul>	

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